

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



(use as many sheets as necessary)

Application Number	10/020,838
Filing Date	12/10/2001
First Name of Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	

Sheet 1 of 2

Attorney Docket Number	P214009
------------------------	---------

Examiner Initials*	Cite No. ²	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ²			
HL		4,769,771		Lipmann et al.	09-1988	
		6,546,436		Fainmesser et al.	04-2003	
		5,724,074		Chainani et al.	03-1998	
		6,497,606		Fong et al.	12-2002	
		6,290,565		Gaylean III et al.	09-2001	
		6,012,961		Sharpe et al.	01-2001	
		6,309,275		Fong et al.	10-2001	
		4,923,428		Curran, Kenneth J.	05-1990	
		6,083,104		Choi, Kei Fung	07-2000	
		5,390,304		Leach et al.	02-1995	
		4,987,537		Kawata, Kazuhide	01-1991	
		6,678,713		Mason et al.	01-2004	
		6,442,451		Lapham, John R.	08-2002	
		6,301,634		Gomi et al.	10-2001	
		6,031,973		Gomi et al.	02-2000	
		5,805,785		Dias et al.	09-1998	
		5,754,855		Miller et al.	05-1998	
		5,625,821		Record et al.	04-1997	
		4,800,521		Carter et al.	01-1989	
		6,400,996		Hoffberg et al.	06-2002	

[illegible]

Here to

2/24/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Best Available Copy

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/020,838
Filing Date	12/10/2001
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	

Sheet 2

of 2

Attorney Docket Number	P214009
------------------------	---------

[illegible][illegible]

**Examiner
Signature**

Given \mathcal{C}

Date	
Considered	

2-кв.от

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231 . **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/020,838
		Filing Date	12/10/2001
		First Named Inventor	David W. Brown
		Group Art Unit	2153
		Examiner Name	
Sheet 1	of 1	Attorney Docket Number	P214009

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T*
HL		US pub. No. 2003/0069998 to Brown et al.	
HL		US pub. No. 2002/0177453 to Chen et al.	
		RECEIVED	
		SEP 10 2004	
		Technology Center 2100	

Examiner Signature	H. Chen	Date Considered	2/24/06
--------------------	---------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

(use as many sheets as necessary)

Sheet 1 of 2

Application Number	10/020,838
Filing Date	12/10/2001
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	G. Burgess
Attorney Docket Number	P214009



U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ²	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ²			
HL		6,028,593		Rosenberg et al.	02/22/2000	
Y		5,821,920		Rosenberg et al.	10/13/1998	
		5,956,484		Rosenberg et al.	09/21/1999	
		6,101,530		Rosenberg et al.	08/08/2000	
		6,125,385		Wies et al.	09/26/2000	
		6,061,004		Rosenberg	05/09/2000	
		6,046,727		Rosenberg et al.	04/04/2000	
		6,078,308		Rosenberg et al.	06/20/2000	
		6,100,874		Schena et al.	08/08/2000	
		6,128,006		Rosenberg et al.	10/03/2000	
		6,131,097		Peurach et al.	10/10/2000	
		5,438,529		Rosenberg et al.	08/01/1995	
		5,623,582		Rosenberg	04/22/1997	
		5,576,727		Rosenberg et al.	11/19/1996	
		5,691,898		Rosenberg et al.	11/25/1997	
		6,057,828		Rosenberg et al.	05/02/2000	
		5,889,672		Schuler et al.	03/30/1999	
		5,701,140		Rosenberg et al.	12/23/1997	
		5,739,811		Rosenberg et al.	04/14/1998	
		5,734,373		Rosenberg et al.	03/31/1998	

[illegible]

**Examiner
Signature**

Hienle

Date
Considered

21.24106

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231 . **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/020,838
--------------------	------------

Filing Date	12/10/2001
--------------------	------------

First Named Inventor	David W. Brown
----------------------	----------------

Group Art Unit	2153
----------------	------

Examiner Name	G. Burgess
---------------	------------

Attorney Docket Number | **P214009**

Sheet 2

of 2

Attorney Docket Number

P214009

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	Huan le	Date Considered	21.24 / 0.6
-----------------------	---------	--------------------	-------------

1 Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231 . **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number 10/020,838
Filing Date 12/10/2001
First Named Inventor David W. Brown
Group Art Unit 2153
Examiner Name G. Burgess
Attorney Docket Number P214009

RECEIVED

MAR 30 2004

Technology Center 2100

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	†
HL	1	BRADLEY BARGEN and PETER DONNELLY; <u>Inside Direct X – In Depth Techniques for Developing High-Performance Multimedia Applications</u> ; 1988; Chps. 1, 18-20, 22-27; Microsoft Press; U.S.	
	2	PETER KOVACH; <u>Inside Direct3D – The Definitive Guide for Real-Time 3D Power and Performance for Microsoft Windows</u> ; 2000; Chps. 1, 7, 15; Microsoft Press; U.S.	
	3	M. FARSI and M. BARBOSA; <u>CANopen Implementation - Applications to Industrial Networks</u> ; 2000; Research Studies Press Ltd.; England and U.S.	
	4	WOLFHARD LAWRENZ; <u>CAN System Engineering – From Theory to Practical Applications</u> ; 1997; Springer-Verlag New York, Inc.; U.S.	
	5	ALLEN-BRADLEY; "CNCnet Software Library"; October, 1992; Publication 8000-6.1.1; U.S.	
	6	ROBERT BOSCH GmbH; "CAN Specification"; September, 1991; Version 2.0.	
	7	SISCO, INC.; "Overview and Introduction to the Manufacturing Message Specification (MMS)"; 1994-1995; Revision 2; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
	8	ISO-9506-1 "Industrial Automation Systems—Manufacturing Message Specification—Part 1: Service definition"; August, 2000; pp. i-22; ISO/IEC; Switzerland.	
	9	ISO-9506-2 "Industrial Automation Systems—Manufacturing Message Specification—Part 2: Protocol specification"; August 2000; pp. i-6; ISO/IEC; Switzerland.	
	10	SISCO, INC.; "MMS-EASE"; January 1996; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
	11	ANSI/EIA-484-A "Electrical and Mechanical Interface Characteristics and Line Control Protocol Using Communication Control Characters for Serial Data Link Between a Direct Numerical Control System and Numerical Control Equipment Employing Asynchronous Full Duplex Transmission"; June, 1995; Electronic Industries Association; U.S.	

Examiner Signature	<i>Huan C</i>	Date Considered	2/24/06
--------------------	---------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number ‡ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

Application Number 10/020,838
Filing Date 12/10/2001
First Named Inventor David W. Brown
Group Art Unit 2153
Examiner Name G. Burgess
Attorney Docket Number P214009

RECEIVED

MAR 30 2004

Technology Center 2100

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	†
HL	12	ISO/IEC 7498-1 "Information Technology—Open Systems Interconnection-Basic Reference Model: The Basic Model"; November 1994; U.S.	
	13	ISO/IEC 7498-3 "Information Technology—Open Systems Interconnection-Basic Reference Model: Naming and Addressing"; April 1997; U.S.	
	14	TODD J. SCHUETT; "The Benefits and Data Bottlenecks of High Speed Milling"; August, 1995; conference paper presented at Southeastern Michigan Chapter American Mold Builders Association; Creative Technology Corporation; U.S.	
	15	TODD J. SCHUETT; "The Ultimate DNC; Direct CNC Networking (DCN)"; <u>Modern Machine Shop</u> ; January, 1996; Creative Technology Corporation; U.S.	
	16	TODD J. SCHUETT; "Advanced Controls for High Speed Milling"; conference paper presented at the SME "High Speed Machining" conference; May 7-8, 1996; Creative Technology Corporation; U.S.	
	17	LEITAO, MACHADO & LOPES; "A Manufacturing Cell Integration Solution"; paper developed at CCP as a part of the ESPRIT 5629 Project; October, 1995.	
	18	MITSUBISHI ELECTRIC; <u>Mitsubishi Electric Advance: Programmable Logic Controllers Edition</u> ; September, 1996; Vol. 76; Mitsubishi Electric Corporation; Tokyo.	
	19	FARSI, M.; "Flexible and Reliable Robotics Cells in Factory Automation"; 1993; pp. 520-525.	
	20	CHU & WANG; "Development of a Practical SFC System for CNC Machine Shop"; <u>International Conference on Data and Knowledge Systems for Manufacturing and Engineering</u> ; May 1994; pp. 362-367, Vol. 1; pp. xx+745, Vol. 2; Chinese Univ.; Hong Kong.	
	21	FARSI, M.; "Device Communication for Flexible Manufacturing:-A New Concept"; 1994; pp. 328-334.	
	22	FARSI, M.; "A Production Cell Communication Model in Factory Automation Using the Controller Area Network"; 1995; pp. 90-95.	

Examiner
Signature

H. Chen

Date
Considered

2/24/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number 2 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

+

Complete if Known

Application Number	10/020,838
Filing Date	12/10/2001
First Named Inventor	David W. Brown
Group Art Unit	2153
Examiner Name	G. Burgess
Attorney Docket Number	P214009

(use as many sheets as necessary)

Sheet 3 of 3

Attorney Docket Number	P214009
------------------------	---------



OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T*
HL	23	FARSI, M. "CANopen: The Open Communications Solution"; 1996; pp. 112-116.	
	24	KATAYAMA et al.; "A Motion Control System with Event-driven Motion-module Switching Mechanism for Robotic Manipulators"; <u>IEEE International Workshop on Robot and Human Communication</u> ; July, 1993; pp. 320-325; U.S.	
	25	MATSUI et al.; "An Event-Driven Architecture for Controlling Behaviors of the Office Conversant Mobile Robot, Jijo-2"; <u>Proceedings of the 1997 IEEE International Conference on Robotics and Automation</u> ; April 1997; pp. 3367-3372; U.S.	
	26	MICROSOFT CORPORATION; "How to Write and Use ActiveX Controls for Microsoft Windows CE 3.0"; <u>Windows CE 3.0 Technical Articles</u> ; June, 2000; pp. 1-5.	
	27	MICROSOFT CORPORATION; "Notes on Implementing an OLE Control Container"; <u>ActiveX Controls Technical Articles</u> ; September 21, 1994; pp. 1-47.	
	28	MICROSOFT CORPORATION; "What OLE Is Really About"; <u>OLE (General) Technical Articles</u> ; July, 1996; pp. 1-33.	
		RECEIVED	
		MAR 30 2004	
		Technology Center 2100	

**Examiner
Signature**

Hier 6

**Date
Considered**

2/24/06

1 Unique citation designation number 2 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known	
		Application Number	10/020,838
		Filing Date	12/10/2001
		First Named Inventor	David W. Brown
		Group Art Unit	2142
		Examiner Name	Le, Hieu C.
		Attorney Docket Number	P214009
Sheet	1	of	1

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ²	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ²			
AC	1	4,829,419		Hyatt	05-09-1989	
AC	2	5,005,134		Nakashima et al.	04-02-1991	
AC	3	5,291,416		Hutchins	03-01-1994	
AC	4	5,368,484		Copperman et al.	11-29-1994	
AC	5	5,382,026		Harvard et al.	01-17-1995	
AC	6	5,400,345		Ryan, Jr.	03-21-1995	
AC	7	5,405,152		Katanics et al.	04-11-1995	
AC	8	5,413,355		Gonzalez	05-09-1995	
AC	9	5,618,179		Copperman et al.	04-08-1997	
AC	10	5,704,837		Iwasaki et al.	01-06-1998	
AC	11	5,766,077		Hongo	06-16-1998	
AC	12	5,772,504		Machiguchi	06-30-1998	
AC	13	5,802,365		Kathail et al.	09-01-1998	
AC	14	5,921,780		Myers	07-13-1999	
AC	15	5,984,499		Nourse et al.	11-16-1999	
AC	16	6,065,365		Ostler et al.	05-23-2000	
AC	17	6,080,063		Khosla	06-27-2000	
AC	18	6,133,867		Eberwine et al.	10-17-2000	
AC	19	5,625,820		Hermesmeier et al.	04-29-1997	
AC	20	6,518,980		DeMotte et al.	02-11-2003	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Office ³	Number	Kind Code ⁵ (if known)				

Examiner Signature <u>Andrew Caldwell</u>	Date Considered <u>6/5/06</u>
---	-------------------------------

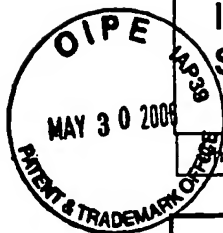
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

†Unique citation designation numbers: See attached Kinds of U.S. Patent Documents. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	10/020,838
		Filing Date	12/10/2001
		First Named Inventor	David W. Brown
		Group Art Unit	2142
		Examiner Name	Le, Hieu C.
		Attorney Docket Number	P214009
Sheet 1	of 1		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
AC	1	STEWART, SCHMITZ, KHOSLA; "Implementing Real-Time Robotic Systems Using CHIMERA II", IEEE, 1990, pp. 254-255, Sections 3.1 and 3.2	
AC	2	PAIDY, REEVE; "Software Architecture for a Cell Controller", IEEE, 1991, pp. 344-349	
AC	3	PAYTON, D. , BIHARI, T.; "Intelligent Real-Time Control of Robotic Vehicles", ACM, 8/1/1991, pp. 49-63, Volume 34, No. B.	
AC	4	BLASVAER, PIRJANIAN; "An Autonomous Mobile Robot System", 6/8/1994, pp 52-61 and 122-124, Chapters 4 and 6.7	
AC	5	PIRJANIAN, CHRISTENSEN; "Hierarchical Control for Navigation Using Heterogeneous Models", 11/1/1995, 19 pages, Denmark.	
AC	6	GLOBALSPEC; "About CNC Controllers", 1999, INTERNET LOCATION: http://motion-controls.globalspec.com/LearnMore/Motion_Controls/Machine_Motion_Controllers/CNC_C_ontrollers	
AC	7	NILSSON, K. , JOHANSSON, R.; "Integrated Architecture for Industrial Robot Programming and Control", Elsevier Science Publishers B.V, 5/20/1999, Robotics and Autonomous Systems, pp. 205-226, Volume 29	
AC	8	BROWN, K.; "SOAP for Platform Neutral Interoperability", 9/1/2000, 16 pages.	

Examiner Signature	Andrew Caldwell	Date Considered	6/16/06
--------------------	-----------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number: Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comment on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☒ **BLACK BORDERS**

☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☐ **FADED TEXT OR DRAWING**

☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☐ **SKEWED/SLANTED IMAGES**

☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.